

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. Cancelled

2. Cancelled

3. (Previously Presented) A method for processing of a silicon wafer, comprising:

subjecting a cleaned, lapped silicon wafer having degraded superficial layers to an etching process with an aqueous acid etching solution and an alkali etching solution to obtain an etched wafer,

a front surface mirror-polishing process to mirror-polish one surface of said etched wafer,
and

a cleaning process to clean the front surface mirror-polished wafer,

wherein said etching process is a process in which the alkali etching is performed after the acid etching,

wherein the acid etching is performed by a spincoating method, in which the acid etching solution is dripped on the silicon wafer, and said wafer is spun so that said dripped acid etching solution is expanded on the whole wafer surface,

wherein the alkali etching is performed by immersing the silicon wafer into the alkali etching solution, and

wherein said aqueous acid etching solution is mainly composed of hydrofluoric acid and nitric acid, and contains phosphoric acid in an amount equal to or more than 30 percent by weight, based upon 100 percent by weight of the aqueous acid etching solution.

4. (Previously Presented) The method according to claim 3, further including a rear surface slight-polishing process to polish a portion of the unevenness of the wafer rear surface formed by said etching process between the etching process and the front surface mirror-polishing process.

5. (Currently Amended) The method according to claim 3, wherein, the aqueous acid etching solution contains phosphoric acid in an amount of 30 to 40 percent by weight, based upon 100 percent by weight of the aqueous acid etching solution.

6. Cancelled.

7. (Previously Presented) The method according to claim 3 wherein the acid etching solution and the alkali etching solution are stored in separate etching tanks.

8. (Previously Presented) The method according to claim 3 wherein a cleaning process is performed between the acid etching process and the alkali etching process.

9. (Currently Amended) The method according to claim 4 wherein a cleaning process is performed after the alkali etching process but before the rear surface ~~mirror-polishing~~ slight-polishing process.

10. (Previously Presented) The method according to claim 8 wherein a cleaning process is performed after the alkali etching process but before the front surface mirror-polishing process.

11. (Previously Presented) The method according to claim 4 wherein the rear surface slight-polishing process removes the rear surface less than 1 μm .

12. (Previously Presented) The method according to claim 4 wherein the rear surface slight-polishing process removes the rear surface less than 0.3 μm .